

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52

**(10) International Publication Number**  
**WO 2004/003912 A1**

- [Continued on next page]*

**WO 2004/003912 A1**

**WO 2004/003912 A1**



---

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

## INTERNATIONAL SEARCH REPORT

Application No

PCT/IB 03/02825

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 G11B27/28 G11B27/10 G06F17/30

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 G11B G06F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, INSPEC

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,X	US 2003/028721 A1 (WOODWARD MARK L) 6 February 2003 (2003-02-06)	12-14
P,A	the whole document	1,8
P,A	US 2003/112729 A1 (NICHOLS JAMES B ET AL) 19 June 2003 (2003-06-19)	1,8,12
A	the whole document	
A	WO 92 07360 A (MORO MARIO) 30 April 1992 (1992-04-30)	1,8
A	the whole document	
A	US 6 188 659 B1 (MUELLER WILLIAM J ET AL) 13 February 2001 (2001-02-13)	1,8
	the whole document	
	---	
	-/--	

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

## \* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

\*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

\*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

\*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

\*G\* document member of the same patent family

Date of the actual completion of the international search

31 October 2003

Date of mailing of the international search report

07/11/2003

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax (+31-70) 340-3016

Authorized officer

Daalmans, F

## INTERNATIONAL SEARCH REPORT

Application No  
PCT/IB 03/02825

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 97 05616 A (SONY ELECTRONICS INC) 13 February 1997 (1997-02-13) page 5, line 13 -page 6, line 7 -----	1
A	WO 98 25269 A (THOMSON CONSUMER ELECTRONICS) 11 June 1998 (1998-06-11) page 3, line 32 -page 4, line 2 page 10, line 28 -page 11, line 38 -----	1
A	WO 02 46968 A (OPENGLOBE INC) 13 June 2002 (2002-06-13) page 8, paragraph 22 -page 9, paragraph 27 -----	1
A	US 6 304 523 B1 (JONES SCOTT A ET AL) 16 October 2001 (2001-10-16) column 5, line 13 - line 59 -----	1

## INTERNATIONAL SEARCH REPORT

 Application No  
 PCT/IB 03/02825

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2003028721	A1	06-02-2003	NONE
US 2003112729	A1	19-06-2003	WO 03052759 A1 26-06-2003
WO 9207360	A	30-04-1992	WO 9207360 A1 30-04-1992
US 6188659	B1	13-02-2001	NONE
WO 9705616	A	13-02-1997	US 5751672 A 12-05-1998 AT 192879 T 15-05-2000 AU 700004 B2 17-12-1998 AU 6344896 A 26-02-1997 CA 2227519 A1 13-02-1997 CN 1192285 A 02-09-1998 DE 69608281 D1 15-06-2000 DE 69608281 T2 30-11-2000 EP 0840927 A1 13-05-1998 HK 1007910 A3 30-04-1999 JP 11514482 T 07-12-1999 WO 9705616 A1 13-02-1997 US 6388958 B1 14-05-2002 US 6247022 B1 12-06-2001 US 2001056424 A1 27-12-2001 US 2001004338 A1 21-06-2001 US 6147940 A 14-11-2000 US 6128255 A 03-10-2000 US 2001056430 A1 27-12-2001 US 6128625 A 03-10-2000
WO 9825269	A	11-06-1998	US 6034925 A 07-03-2000 US 6031795 A 29-02-2000 AU 7627398 A 29-06-1998 CN 1284721 A 21-02-2001 CN 1284722 A 21-02-2001 CN 1239573 A 22-12-1999 DE 69716632 D1 28-11-2002 DE 69716632 T2 31-07-2003 EP 1152421 A2 07-11-2001 EP 0941537 A1 15-09-1999 JP 2001506795 T 22-05-2001 JP 2001313892 A 09-11-2001 KR 2000057236 A 15-09-2000 WO 9825269 A1 11-06-1998 US 6252831 B1 26-06-2001 US 6226235 B1 01-05-2001 JP 2001273748 A 05-10-2001
WO 0246968	A	13-06-2002	EP 1352340 A2 15-10-2003 US 2002069195 A1 06-06-2002 WO 0246968 A2 13-06-2002
US 6304523	B1	16-10-2001	JP 2000215653 A 04-08-2000 US 2002048224 A1 25-04-2002